

# Nicolas MOËS

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## ***Current position***

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Professor of mechanical engineering, Ecole Centrale de Nantes

## ***Education***

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Mechanical Engineering, Université de Liège, Belgique (1992)  
Ph. D. Ecole Normale Supérieure de Cachan (France) (1996)

## ***Research Interests***

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Computational methods in engineering for fracture and impact.  
Extended finite element method (X-FEM)  
Software development for finite elements : C++ and parallel.

## ***Career***

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Professor of Mechanical Engineering, Ecole Centrale de Nantes, since 2001  
Habilitation à diriger les recherches, Université Pierre et Marie Curie (France), 2000  
Research Assistant Professor, Northwestern University (USA), 1999-2001  
Research Assistant, Northwestern University (USA), 1998-1999  
Post-Doctoral Fellow, University of Texas at Austin (USA), 1996-1998

## ***Honors and awards***

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Young researcher French award (ACI Jeunes chercheurs) (2001) Jean Mandel Prize from the French association of mechanics (2003)

## ***Professional activities***

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### *Editorial boards*

Revue Européenne des éléments finis, since 2003

### *Community services*

Recruiting board of the University of Rennes (France) since 2004

### *University services*

Scientific Council, Ecole Centrale de Nantes since 2002  
Chairman of the recruiting board of the Ecole Centrale de Nantes since 2004  
Recruiting board of the Ecole Centrale de Nantes since 2002  
Teaching department council since 2003

## ***Summary of journal publications***

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<b>Journal</b>	<b>Impact factor</b>	<b>Number of papers</b>
International Journal for Numerical Methods in Engineering	1,691	12
Computer Methods in Applied Mechanics and Engineering	1,252	8
Other indexed journals		3
Other papers in refereed journals		6

### ***Selected publications (max. 5)***

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Moës N, Dolbow J, Belytschko T, "A finite element method for crack growth without remeshing".  
International Journal For Numerical Methods in Engineering, 1999 (119 times cited)

Belytschko T, Moës N, Usui S, Parimi C, "Arbitrary discontinuities in finite elements", International  
Journal for Numerical Methods in Engineering 2001 (59 times cited)

Moës N, Belytschko T, "Extended finite element method for cohesive crack growth, Engineering fracture  
mechanics", International Journal for Numerical Methods in Engineering 2002 (22 times cited)

Moës N, Oden J.T, Zohdi T.I, "Investigation of the interactions between the numerical and the modeling  
errors in the homogenized Dirichlet projection method", Computer Methods In Applied Mechanics And  
Engineering, 1999

Ladevèze P, Moës N, Douchin B, "Constitutive relation error estimators for (visco)plastic finite element  
analysis with softening", Computer Methods In Applied Mechanics And Engineering, 1999

### ***Other relevant information***

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